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Chujo et al.

[45] **Date of Patent:** **Aug. 15, 1995**[54] **INK-JET RECORDING INK AND INK-JET RECORDING METHODS THEREOF**4,778,525 10/1988 Kobayashi et al. 106/22 B
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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 200,019, Feb. 22, 1994, abandoned.

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Attorney, Agent, or Firm—Oliff & Berridge[57] **ABSTRACT**

Ink-jet recording ink comprising water, a water-soluble organic solvent and a color material as essential ingredients, wherein the total volume of particulate matter ranges from 1×10^{-9} to 1×10^{-2} cm³ per cm³ of ink, whereby defects in images such as blank areas on images, fluctuations in dot diameter and the disturbed shape of dots are not generated to give a prominent effect and wherein the total volume of the particulate matter existing in 1 cm³ of the ink is adjusted to 3.5×10^{-6} or less, whereby ink which is stable even after long-term use can be obtained and change in amount of ink at jetting is slight, as well as defects in images can be prevented.

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106/22 B[58] Field of Search 106/22 C, 22 B, 20 C,
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